

# 3000M

## Conversational CNC Controls for Milling





## **ANILAM 3000M**

### Changing The Way You Think About Controls

The 3000M gives you more programming flexibility with hard drives that have storage capabilities ranging from large CAM-generated programs to average size daily functioning programs. These controls are configured to your needs: whether it's 2, 3 or 4 Axes.

The PC-based 3000M uses true conversational format – real machinist's language to prompt you for various movements and functions.

Installation has been made simple. More components have been built into the console. There is only one cabinet. Electrical connections just snap in. In fact, the total installation process can be completed in one day.

#### **ACCURACY**

Precision-ground ballscrews with preloaded ball nut assemblies.

#### **PERFORMANCE**

Finest, industrial grade processors ensure outstanding performance and operation in all areas of program management.

#### **SAFETY**

Software limits are standard with every package. Machine limits are optional.

#### **HARDWARE OPTIONS**

Autolube, precision linear encoders, electronic handwheel, remote start/stop and networking.

### POWERFUL AC BRUSHLESS SERVO MOTORS

Maintains smooth operation and precise positioning.

#### **HANDWHEELS**

Provides all manual operations. Ideal for set up and teach modes and for machining the simplest parts.

#### **DATA STORAGE**

Compact Flash external data storage makes transferring program files between the control and personal computers simple.

ANILAM 3000M 3 Axes Control with Z Axis



The computer, motion control, compact flash drive and 8 GB hard drive are built right into the console. Plus, the new simplified design of the CNC control software includes the timer and parts counter.

#### **TAPPING**

With the machine control option, the 3000M provides the most common tapping cycles. Rigid tapping requires a spindle encoder.

#### **BOLT-HOLE PATTERNS**

Used to drill either full or partial bolt hole circles by filling in the first angle, number of holes and diameter of the circle.

#### DXF CONVERTER

With just a minimal amount of editing, the program is ready to cut parts.

X -15.0000 Y 1 3942 Z 0.0000 Part 1 3942 Z 0.0000 Part 1 3940 Pa

For more information or a for free demo visit us online at www.anilam.com today!











#### THE ANILAM OFFLINE SOFTWARE PACKAGE

This optional package allows offline programming and the transfer of small and large programs.

#### **QUICK, EASY, SNAP-IN CONNECTIONS**

The total installation process can be completed in one day.

#### Y-AXIS DRIVE ASSEMBLY

Driven by a powerful 27"/lb (3.3 Nm) AC brushless servo motor (optional 41"/lb., 4.6 Nm), this assembly features a tough and extremely durable one-piece machined casting.

#### X-AXIS DRIVE ASSEMBLY

A rugged one-piece machined casting guarantees years of reliable operation. Anilam's high quality kit components finish the machine with both the appearance and performance of today's finest CNC equipment.

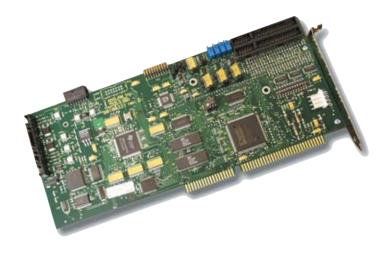
#### **BALL SCREWS**

Precision ground for high accuracy.

### 3000M HARDWARE KITS

Available for both new and old models of the most common knee mills and bed mills.





#### DSP<sup>2</sup>

#### An enhanced motion control system

Provides significant increases in productivity by producing high speed machining.

#### **QUILL DRIVE ASSEMBLY WITH DISCONNECT**

This durable one-piece casting incorporates Anilam's unique and proven quill block drive design. This Z-axis downfeed assembly ensures accuracy, repeatability and can take real cuts for many years to come.

The disconnect capability allows the operator to switch between 2-axis and 3-axis machining on the fly. The Z-axis servo drive unit quickly disconnects from the quill. The precision-ground ballscrew is driven by a powerful 27"/lb. (3.3 Nm) AC brushless servo motor.

### **ANILAM 3000M**

From Complete Kits To Custom Configurations

Our worldwide reputation for quality components ensures the precise, trouble-free operation of ANILAM controls. From drive assemblies to state-of-the-art circuit boards, each component has been engineered to ANILAM's standard-setting specifications. Suited to fit all your needs.



### 3000M Specifications

General Operation	2X	3X	4X
Automatic, Single Step and Manual Modes	•	•	•
Background Functions (Program, Edit, RS-232 etc.)	•	•	•
Feedrate, Program/Distance To Go, Machine Position Displays	•	•	•
Tool number, diameter and length offset display	•	•	•
Loop counter, dwell time, Timer and Parts counter display	•	•	•
Automatic and programmable homing	•	•	•
Integrated Motion Setup and Testing Software	•	•	•
DNC (Direct Numerical Control)	•	•	•
Teach-in mode	•	•	•
Programming, Program Editing, Programming Tools	2X	3X	4X
Programming Input MDI, RS232 and Floppy Disk	•	•	
Networking	Optional	Optional	Optional
Inch/Metric Conversion	•	•	
Absolute/Incremental Programming	•		
Conversational Programming			
Blueprint Programming			
Polar/Coordinate Programming	•		
Help Graphics		•	
Rotation		•	
Mirroring		•	
Scaling		•	
G-Code to Conversational Converter			
Triangle, Math and ICON Geometry Calculator			
Plane Selection			
Hot Keys on Numeric Keypad			
Off-line Software Package (Windows 3.11, 95, and NT compatible)	Optional	Optional	Optional
Work Coordinate Offsets (with calib. Key)	9	9	9
Graphics	2X	зх	4X
Isometric, XY, XZ and YZ View		•	•
Automatic Fit		•	•
Real Time Draw Graphics		•	•
Tool Display	•	•	•
Simulate a section of or the entire program	•	•	•
Compensations	2X	3X	4X
Number of tools in libarary	99	99	99
Diameter/Radius, Length Offsets	•	•	•
Length offset calibration (input to table)	•	•	•
Leadscrew compensation	•	•	•
Backlash Compensation	•	•	•
Linear Compensation		•	

		•	A **
			4
		-	71

One Precision Way
Jamestown, NY 14701
@ (716) 661-1700
[EXX] (716) 661-1888
e-mail: sales@anilam.com

www.anilam.com



Computer, Motion Control and Interface	2X	3X	4X
INTEL Pentium CPU, 166Mhz	•	•	•
DRAM	8MB	8MB	8MB
DRAM Upgrade to 16MB, 32MB or 64MB	Optional	Optional	Optional
	• Optional	• Optional	• Optional
Compact Flash Remote Data Storage  RS-232 Port	•		
Printer Port			
Hard Drive	8MB	8MB	8MB
32-bit 50 Mhz (100 Mflops) DSP2 Motion Control Board w/ CAN Bus Interface - Surface Mount Design	•	•	• OIVID
Controlled Axes	2	3	4
Programmable Spindle Axis	Optional	Optional	Optional
DRO Axis (1)	1	1	1
Block Cycle Time	5 MS	5 MS	5 MS
Block Throughput	200	200	200
Standard I/O Available	10/6	10/6	10/6
Console	2X	3X	4X
12.1" TFT Flat Screen	•	•	•
Jog Resolution Key (x1, x10, x100, Feed, Rapid)	•		
	•		
Jog Keys for Controlled Axes	•	•	
DB-25 Printer Port Access	•		
DE-9 RS232 Communications Port Access	•		•
DB-25 Handwheel Port Access	•		•
Mini DIN Connector for PC Keyboard	•	•	•
Compact, Contamination-Proof Display and Keypad Enclosure	•	•	•
Console Mounting Arm	•	•	•
DE-9 Remote Start/Stop	•	•	•
Floppy Access in Console	•	•	•
Canned Cycles	2X	3X	4X
Ellipse	•	•	•
Elbow Milling		•	•
Frame Pocket Milling	•	•	•
Hole Milling	•	•	•
Circular Pocket Milling	•	•	•
Rectangular Pocket Milling	•	•	•
Full Bolt Hole Pattern	•	•	•
Partial Bolt Hole Pattern	•	•	•
Basic Drilling	•	•	•
Irregular Pocket with islands	•	•	•
Boring		•	•
Peck Drilling		•	•
Chipbreaker Drilling		•	•
Rectangular Hole Pattern	•	•	•
Spiral Helical		•	•
Mold Rotation about any Axis		•	•
Tapping		•	•
Rectangular Profile (inside/outside)	•	•	•
Face Milling	•	•	•
Circular Profile (inside/outside)	•	•	•